REMARKS

This is a full and timely response to the outstanding Office action mailed October 17, 2005. Upon entry of the amendments in this response claims 2-18, and 21-46 are pending. More specifically, claims 2, 21, 26, 27, 31, 45, and 46 are amended. These amendments are specifically described hereinafter.

I.   **Present Status of Patent Application**

Claims 2-8, 22, 23, 27-30, 32, 33, and 46 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and further in view of *Nodoushani et al* (U.S. Patent No. 6,563,816). Claims 9-18 and 34-42 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816) and in further view of *Waters, et al* (U.S. Patent No. 5,832,069). Claims 24, 25, 43, and 44 are rejected under 35 U.S.C 103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816) and in further view of *Farris, et al* (U.S. Patent No. 5,881,131). Claims 26 and 45 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816) and *Waters, et al* (U.S. Patent No. 5,832,069) and *Farris, et al* (U.S. Patent No. 5,881,131). These rejections are respectfully traversed.

II.   **Examiner Interview**

Applicants' first wishes to express sincere appreciation for the time that Examiner Han spent with Applicants' representatives Jeff Kuester and Benjie Balser during a November 7, 2005, telephone discussion regarding the above-identified Office Action. Applicants believe that various features described in the patent application and recited in the claims, including a mini RAM were discussed during the telephone discussion, and that the outcome of this discussion is addressed herein. During that conversation, Examiner Han seemed to indicate that it would be

potentially beneficial for Applicants to file this amendment and response. Thus, Applicants respectfully requests that Examiner Han carefully consider this amendment and response.

III. Rejections Under 35 U.S.C. §103(a)

A. Claims 2-18 and 2025

The Office Action rejects claims 2-8, 22, and 23 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and further in view of *Nodoushani et al* (U.S. Patent No. 6,563,816). The Office Action rejects claims 9-18 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Iwase, et al* (U.S. Patent No. 6,226,263) in view of *McKenna, et al* (U.S. Patent No. 5,684,967) and *Nodoushani, et al* (U.S. Patent No. 6,563,816) and in further view of *Waters, et al* (U.S. Patent No. 5,832,069). The Office Action rejects claims 24 and 25 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816) and in further view of *Farris, et al* (U.S. Patent No. 5,881,131). For at least the reasons set forth below, Applicant's respectfully traverses the rejection.

Independent claim 2 as amended recites:

2. A method for defining a path through an overall network for communications service between a unit and a service provider, comprising:

storing a topology of an overall network including elements and at least one link among the elements;

receiving a service order for provision of the communications service between the unit and the service provider; and

using information from the service order with the topology to select particular elements from the elements of the overall network and to select at least one particular link between the particular elements as the path for the communications service through the overall network,

wherein the overall network comprises at least a first type of network and a second type of network;

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network;

wherein using the information from the service order with the topology comprises using the information to select a particular element from the DSL network or the ADSL network as a part of the path for the communications service through the overall network;

wherein the digital subscriber line (DSL) network or the asynchronous digital subscriber line (ADSL) network comprises a digital subscriber line access multiplexer (DSLAM);

wherein using the information to select the particular element from the DSL network or the ADSL network comprises using the information to select the DSLAM as the part of the path; and

wherein the digital subscriber line (DSL) network of the asynchronous digital subscriber line (ADSL) network comprises a mini-ram (MR).

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). Applicant's respectfully submits that independent claim 2 is allowable for at least the reason that the combination of *Iwase, McKenna, Nodoushani* does not disclose, teach, or suggest at least **wherein the digital subscriber line (DSL) network of the asynchronous digital subscriber line (ADSL) network comprises a mini-ram (MR).** As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 2, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 2 is allowable.

Because independent claim 2 is allowable over the cited references of record, dependent claims 3-5, 7, 21, 22, and 24, (which depend from independent claim 2) are allowable as a

matter of law for at least the reason that dependent claims 3-5, 7, 21, 22, and 24 contain all the steps/features of independent claim 2. *See Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002) *Jeneric/Pentron, Inc. v. Dillon Co.*, 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); *Wahpeton Canvas Co. v. Frontier Inc.*, 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, the rejection to claims 3-25 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 2, dependent claims 3-5, 7, 21, 22, and 24 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 3-25 are allowable.

B.   Claim 26

The Office Action rejects claim 26 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816) and *Waters, et al* (U.S. Patent No. 5,832,069) and *Farris, et al* (U.S. Patent No. 5,881,131). For at least the reasons set forth below, Applicant's respectfully traverses the rejection.

Independent claim 26 as amended recites:

26.   A method for defining a virtual connection through an overall network for communications service between a unit and a service provider, the overall network including a telecommunications network with a central office serving the unit, and network elements from at least a first network and a second network, the method comprising:

creating a topology of the overall network including elements and links among the
elements by
including the respective building locations and configurations of the
elements in the topology, a building location of an element, a network site, and a

local access and transport area (LATA) name, and a configuration of the element being retrieved from the element, and

including the respective locations and configurations of the links in the topology, a link connecting at least two elements with each element having a location, and a location of the link including an association among the link, the two elements, and each respective location of the at least two elements, and a configuration of the link including a link common location language identifier, a circuit identifier, and a circuit type;

receiving a service order for provision of the communications service between the unit and the service provider with information in the service order including a telephone number, an identifier for the service provider, and a universal service order code (USOC);

mapping the information from the service order onto the topology by using the telephone number, the identifier for the service provider, and the USOC with the topology to select particular elements from the elements of the overall network and to select particular links between the particular elements as the virtual connection for the communications service through the overall network, the virtual connection including the central office from the telecommunications network, and network elements from at least a first and second network; and

assigning a unique identifier to the virtual connection PVC;

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network;

wherein using the information from the service order with the topology comprises using the information to select a particular element from the DSL network or the ADSL network as a part of the path for the communications service through the overall network;

wherein the digital subscriber line (DSL) network or the asynchronous digital subscriber line (ADSL) network comprises a digital subscriber line access multiplexer (DSLAM);

wherein using the information to select the particular element from the DSL

network or the ADSL network comprises using the information to select the DSLAM as

the part of the path; and

wherein the digital subscriber line (DSL) network or the asynchronous digital

subscriber line (ADSL) network comprises a mini-ram (MR).

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references

must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant's

respectfully submits that independent claim 26 is allowable for at least the reason that the

combination of *Iwase, McKenna, Nodoushani, Waters,* and *Farris* does not disclose, teach, or

suggest at least **wherein the digital subscriber line (DSL) network or the asynchronous**

digital subscriber line (ADSL) network comprises a mini-ram (MR). As the cited

combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all

the elements of claim 26, the rejection should be withdrawn. Additionally and notwithstanding

the analysis hereinabove, there are other reasons why claim 26 is allowable.

C.   Claims 27-44

The Office Action rejects claims 27-30, 32, and 33 under 35 U.S.C. §103(a) as allegedly

being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S.

Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816) and in further view of

Farris, et al (U.S. Patent No. 5,881,131). For at least the reasons set forth below, Applicant's

respectfully traverses the rejection.

Independent claim 27 as amended recites:

27.   A system for defining a path through an overall network for provision of

communications services between a unit and a service provider, comprising:

a topology of elements and links linking the elements of the overall network;

information about the unit and about the communications services to the unit; and

a mapper for mapping the information onto the topology to obtain particular elements from the elements of the overall network and to obtain particular links between the particular elements from the links linking the elements of the overall network,

whereby the particular elements and the particular links between the particular elements constitute the path for communications services between the unit and the service provider; and

wherein the overall network comprises a first type of network and a second type of network;

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network;

wherein using the information from the service order with the topology comprises using the information to select a particular element from the DSL network or the ADSL network as a part of the path for the communications service through the overall network;

wherein the digital subscriber line (DSL) network or the asynchronous digital subscriber line (ADSL) network comprises a digital subscriber line access multiplexer (DSLAM);

wherein using the information to select the particular element from the DSL network or the ADSL network comprises using the information to select the DSLAM as the part of the path; and

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network including a digital subscriber line access multiplexer (DSLAM) and a mini-ram (MR).

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant's respectfully submits that independent claim 27 is allowable for at least the reason that the combination of *Iwase, McKenna, Nodoushani,* and *Farris* does not disclose, teach, or suggest at least **wherein the overall network comprises a digital subscriber line (DSL) network or an**

asynchronous digital subscriber line (ADSL) network including a digital subscriber line access multiplexer (DSLAM) and a mini-ram (MR). As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 27, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 27 is allowable.

Because independent claim 27 is allowable over the cited references of record, dependent claims 28, 29, 31-35, 37, 39, 41, and 43 (which depend from independent claim 27) are allowable as a matter of law for at least the reason that dependent claims 28, 29, 31-35, 37, 39, 41, and 43 contain all the steps/features of independent claim 27. Therefore, the rejection to claims 28, 29, 31-35, 37, 39, 41, and 43 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 27, dependent claims 28, 29, 31-35, 37, 39, 41, and 43 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence there are other reasons why dependent claims 28, 29, 31-35, 37, 39, 41, and 43 are allowable.

D.   Claim 45

The Office Action rejects claim 45 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816) and *Waters, et al* (U.S. Patent No. 5,832,069) and *Farris, et al* (U.S. Patent No. 5,881,131). For at least the reasons set forth below, Applicant's respectfully traverses the rejection.

Independent claim 45 as amended recites:

45.   A system for defining a virtual connection through an overall network for communications services between a unit and a service provider, the overall network including a telecommunications network with a central office serving the unit, the overall network also including network elements from at least a first type of network and a second type of network, the system comprising:

a topology of elements and links linking the elements of the overall network; the topology including respective locations and configurations of the elements and of the links,

a location of an element comprising a building location, a network site, and a local access and transport area (LATA) name, and

a configuration of an element being retrieved from the element,

a link connecting at least two elements with each element having a location with the topology including an association among the link, the at least two elements, and each respective location of the two elements, and

a configuration of a link comprising a location identifier, a circuit identifier, and a circuit type;

the topology including the central office and network elements from at least a first type of network and a second type of network;

information about the unit and about the communications services to the unit with the information comprising a telephone number, a circuit identifier for the service provider, a virtual connection identifier for the service provider, and a universal service order code; and

a mapper for mapping the information onto the topology to obtain particular elements from the elements of the overall and network elements from at least a first type of network and a second type of network,

whereby the particular elements and the particular links between the particular elements constitute the virtual connection for communications services between the unit and the service provider, and with the virtual connection having a unique identifier;

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network;

wherein using the information from the service order with the topology comprises using the information to select a particular element from the DSL network or the ADSL network as a part of the path for the communications service through the overall network;

wherein the digital subscriber line (DSL) network or the asynchronous digital subscriber line (ADSL) network comprises a digital subscriber line access multiplexer (DSLAM);

wherein using the information to select the particular element from the DSL network or the ADSL network comprises using the information to select the DSLAM as the part of the path; and

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network including a digital subscriber line access multiplexer (DSLAM) and a mini-ram (MR).

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant's respectfully submits that independent claim 45 is allowable for at least the reason that the combination of *Iwase, McKenna, Nodoushani, Waters,* and *Farris* does not disclose, teach, or suggest at least **wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network including a digital subscriber line access multiplexer (DSLAM) and a mini-ram (MR).** As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 45, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 45 is allowable.

E.   Claim 46

The Office Action rejects claim 46 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Iwase et al* (U.S. Patent No. 6,226,263) in view of *McKenna et al* (U.S. Patent No. 5,684,967) and *Nodoushani et al* (U.S. Patent No. 6,563,816). For at least the reasons set forth below, Applicant's respectfully traverses the rejection.

Independent claim 46 as amended recites:

46.   Computer readable medium for performing a method for defining a path through an overall network for communications service between a unit and a service provider, comprising:

logic for storing a topology of an overall network including elements and at least one link among the elements;

logic for receiving a service order for provision of the communications service between the unit and the service provider; and

logic for using information from the service order with the topology to select particular elements from the elements of the overall network and to select at least one particular link between the particular elements as the path for the communications service through the overall network;

wherein the overall network comprises at least a first type of network and a second type of network;

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network;

wherein using the information from the service order with the topology comprises using the information to select a particular element from the DSL network or the ADSL network as a part of the path for the communications service through the overall network;

wherein the digital subscriber line (DSL) network or the asynchronous digital subscriber line (ADSL) network comprises a digital subscriber line access multiplexer (DSLAM);

wherein using the information to select the particular element from the DSL network or the ADSL network comprises using the information to select the DSLAM as the part of the path; and

wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network including a digital subscriber line access multiplexer (DSLAM) and a mini-ram (MR).

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant's respectfully submits that independent claim 46 is allowable for at least the reason that the combination of *Iwase, McKenna, Nodoushani* does not disclose, teach, or suggest at least **wherein the overall network comprises a digital subscriber line (DSL) network or an asynchronous digital subscriber line (ADSL) network including a digital subscriber line access multiplexer (DSLAM) and a mini-ram (MR).** As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 46 the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 45 is allowable.

V.   Miscellaneous Issues

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for at least the specific and particular reason that the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant's respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 2-18, and 21-46 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,
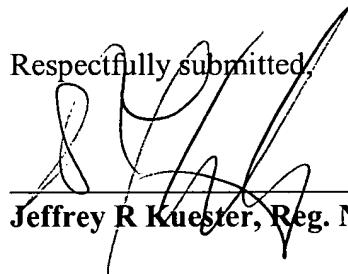
Jeffrey R Kuester, Reg. No. 34,367

THOMAS, KAYDEN,
 HORSTEMEYER & RISLEY, L.L.P.
Suite 1750
100 Galleria Parkway N.W.
Atlanta, Georgia 30339
(770) 933-9500

Customer No.: 38823